

**Penalty rates and the retail, cafe and restaurant; and  
hairdressing and beauty industries.**

**– a report for Australian Business Lawyers and Advisors**

**by**

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## **Introduction**

In preparing this report, I have read, understood and complied with the Federal Court of Australia Practice Note CM 7 regarding Expert Witnesses in Proceedings in the Federal Court of Australia.

I have attached at Appendix A to this report a curriculum vitae which is a summary of my training, study and experience which has allowed me to acquire specialised knowledge in relation to the subject matter contained in this report.

This report seeks to answer several questions related to proposed changes to industry awards, specifically those pertaining to the following (the Relevant Industries):

- the retail industry;
- the cafe and restaurant industry; and
- the hairdressing and beauty industry.

My report addresses the following questions:

1 What is the size of the Relevant Industries? This is answered with particular reference to the revenue and employment (including wages) generated by businesses in the Relevant Industries.

2 What is the importance of the Relevant Industries to the Australian economy?

3 What is the impact of the Relevant Industries on employment, youth employment and facilitating entry to the Australian workforce?

4 What impact do labour costs have on the profitability of the Relevant Industries?

5 To what extent do penalty rate provisions on Sundays and public holidays affect employment in the Relevant Industries on those days?

6 What other supply and demand factors affect employment, output and wages in the Relevant industries?

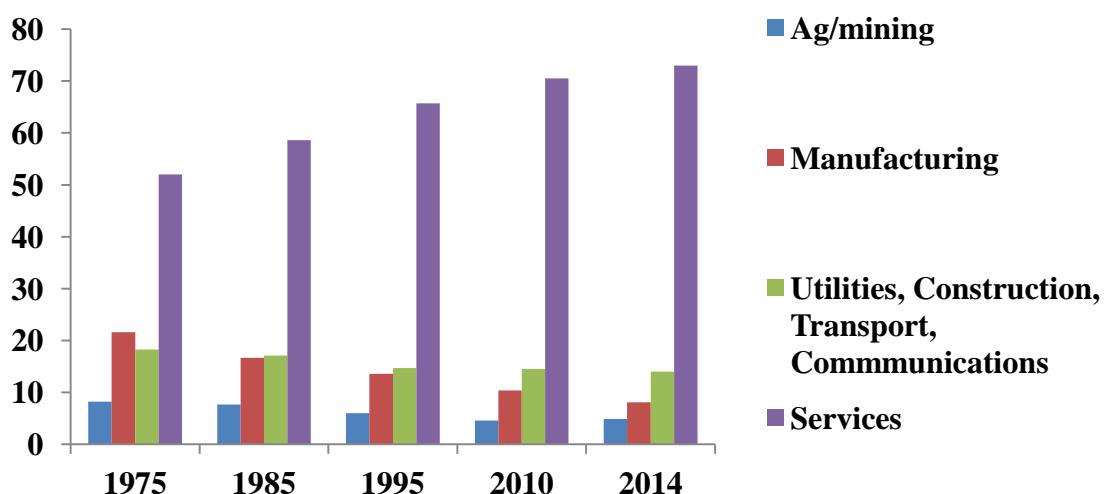
## Overview of the Australian labour market

The Australian economy has undergone significant structural change over the past four decades, the pace of which accelerated in the late 1980s and 1990s following the implementation of broad-ranging microeconomic reform policies (Lewis 2015). It is important to understand these developments in order to appreciate the importance of the retail, cafe and restaurant; and hairdressing and beauty industries.

### Labour demand

The Australian labour market looks quite different to that which existed prior to the succession of oil shocks that hit the world in the 1970s. Even after the 1990s recession the long period of recovery left a large number of the low skilled workforce stranded in long-term unemployment and marginalised employment (Norris and Wooden, 1996). Since the 1991/92 recession, there was a remarkable period of growth, until the Global Financial Crisis in 2008, impacting on total employment in Australia (Lewis 2008). However, this has followed very different trajectories across different industry sectors in the Australian economy (Figure 1). Much of the changing composition of employment can be attributed to changing industry mix which is generally thought of as structural change.

**Figure 1: Employment by industry, percent of total employment**



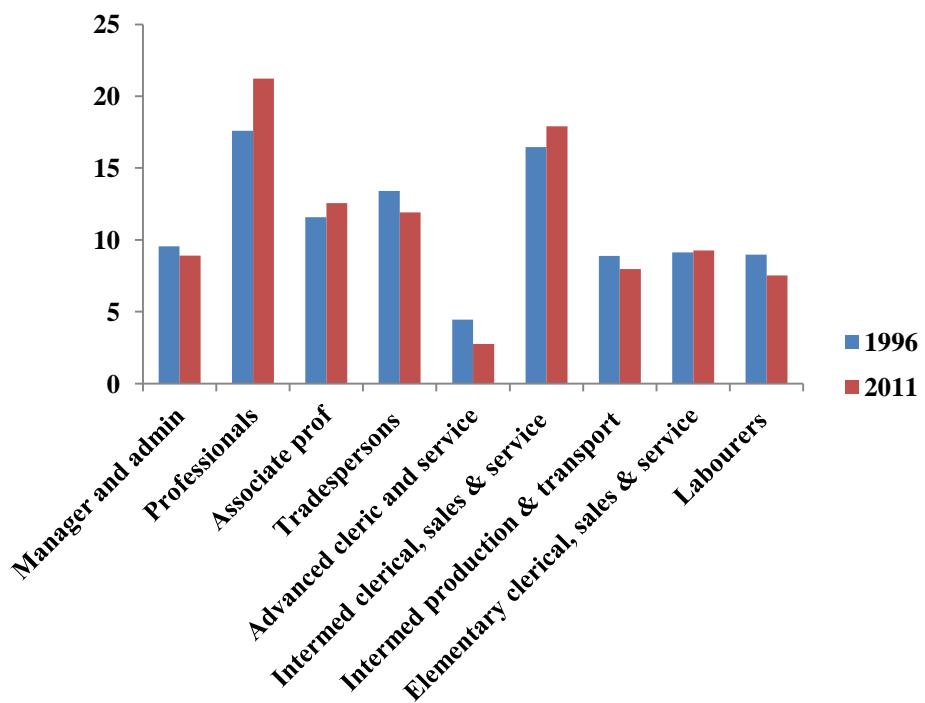
Source: ABS (various years), *Labour Force, Australia*, Cat. No. 6203.0, 6202.0.

In 1975 the ‘soft’ services (such as health, finance, retail, education, restaurants etc)

accounted for just over 50 percent of all jobs, but by 2014 the sector accounted for over 70 percent of all jobs (ABS 2014). By contrast, manufacturing's share of total employment more than halved over the same period to about 8 percent in 2014. There were similar reductions in the relative shares of jobs in the 'industrial' services (such as construction, communications, electricity, gas and water). Primary sector (Agriculture and Mining) employment has for many years made up a relatively small percentage of total employment even given the recent minerals and energy boom.

A combination of structural and technological change has significantly changed the demand for labour with respect to part-time employment, gender and skills (Lewis 2015). More generic and general skills rather than firm-specific skills are required. Less skilled workers are more vulnerable, as are younger and older workers (Lewis 2002). The overall outcome is a more highly skilled workforce and a more efficient economy (OECD 2005). The changes in occupational mix are shown in Figure 2.

**Figure 2: Occupation of Employment, 1996 and 2011, percent**



Source: Australian Bureau of Statistics, *Census of Population and Housing*, 1996 and 2011, unpublished.

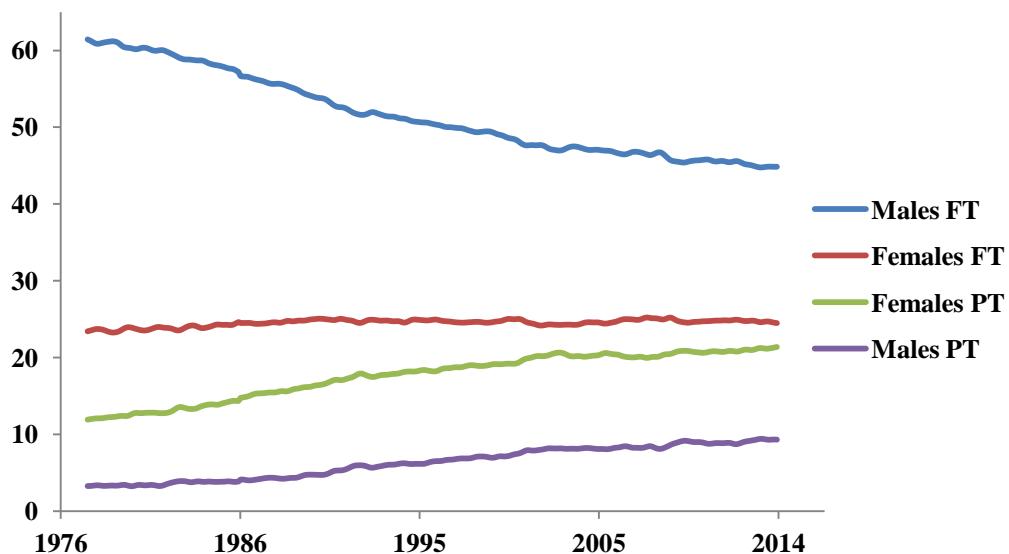
The relative decline in employment of those with manual skills, such as tradespersons and

labourers is clearly seen. Also clear is the relative growth of occupations requiring high levels of education and ‘interactive skills’ such as professionals and associate professionals and community and personal service workers. While part of this growth is no doubt due to the industry changes noted above, particularly the growth in demand for services, part of this is also due to technological change. The picture that emerges, when combined with the industry distribution, is that a ‘typical’ Australian worker today is a ‘white collar’ employee in the service sector.

The major trend in the Australian labour market is that the demand for full-time workers, particularly males, has not kept pace with supply. There has been a substitution of females, particularly part time workers, for full-time male workers. For particular groups, the changes in demand have been particularly noticeable. For instance, a full-time job for anyone 15-20 years old is now an exception rather than the rule and employment prospects are poor for many displaced older males (Lewis 2015)

The long term trend is largely explained by the change in industry mix towards services. Much demand for labour in the service sector differs according to the time of the day or day of the week, particularly in retail, banking, fast food, restaurants, hairdressing etc. Therefore, flexibility in hours worked is required to meet peaks in demand which is greatly facilitated by part-time employees.

**Figure 3: Composition of employment, percent of total employed, 1978-2014**



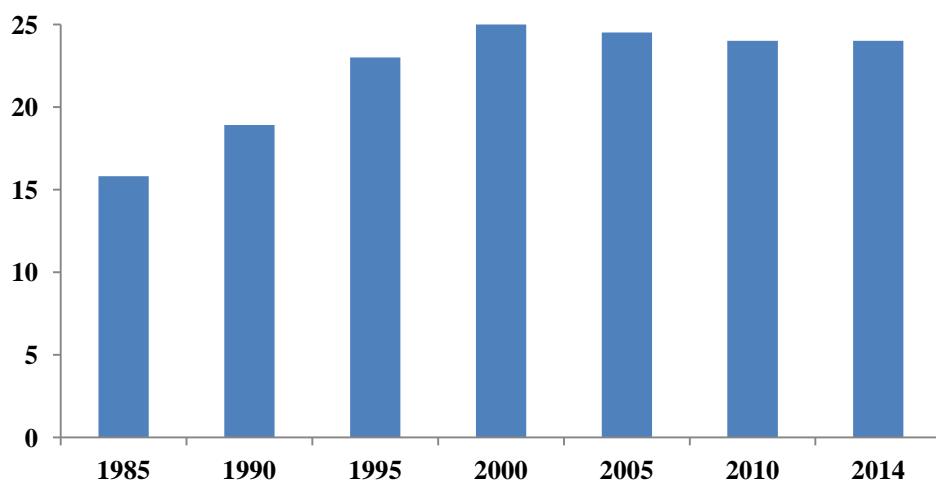
Source: ABS (2014), *Labour Force, Australia, Detailed, Quarterly*, Nov 2014 Catalogue No 6291.0.55.003

Figure 3 shows that the composition of total employment has changed markedly over time. In the 1970s over 60 percent of all those in employment were men working full-time. This had fallen to less than half of all jobs in 2014. Structural change, particularly the relative growth of services and relative decline in manufacturing, together with technological change, have reduced demand for manual labour, which has had the greatest impact on men.

The long term trend is largely explained by the change in industry mix towards services. Much demand for labour in the service sector differs according to the time of the day or day of the week, particularly in retail, banking, fast food, restaurants etc. Therefore, flexibility in hours worked is required to meet peaks in demand which is greatly facilitated by part-time employees. The reason for the observed increase in part-time work for males in more recent periods is more likely to be the result of the economic downturn following the global financial crisis (GFC) whereby firms preferred to reduce hours of work rather than lay workers off.

Another major feature of the changing Australian labour market is growth in casual employment. The growth of casual work was an important phenomenon in the 1980s and 1990s and the proportion of the workforce that is casual reached about 25 percent by 2010 (Figure 4).

**Figure 4: Casual employment, percent of employees, 1978-2014.**



ABS (various years), *Employee Earnings, Benefits and Trade Union Membership, Australia*, Cat No 6310.0

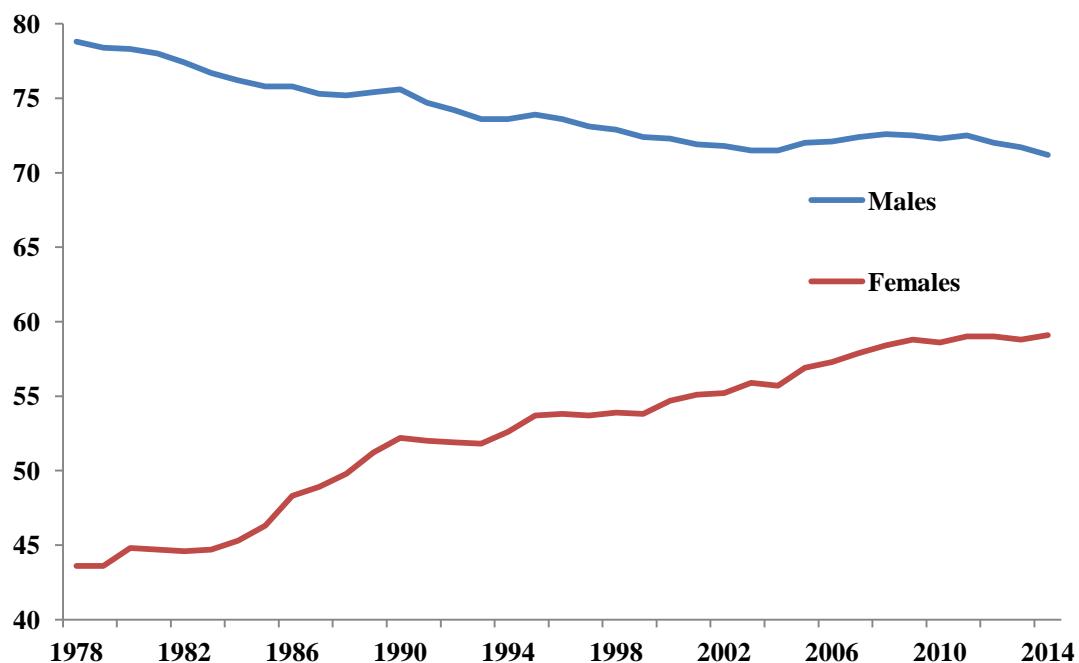
According to Wilkins and Wooden (2014) there appears to be no noticeable increase in casualisation recently or even a small decline. They also show that job tenure is not necessarily short in casual jobs with a quarter of all casuals having worked in the same job for 10 years or more.

Clearly, although part-time and casual work is now a key feature of the Australian labour market, employment is not necessarily insecure, although more flexible.

## Labour Supply

For most Australians the labour market and its education and training system have facilitated the adjustment of labour supply to meet changes in demand. The increased participation of women (particularly women with children) and students in the workforce has greatly facilitated the increased demand for part-time workers and those with interactive skills (Lewis 2006). In addition the education system has significantly increased the average cognitive and education levels. Labour supply has, generally, adjusted well to labour demand due to structural and technological change.

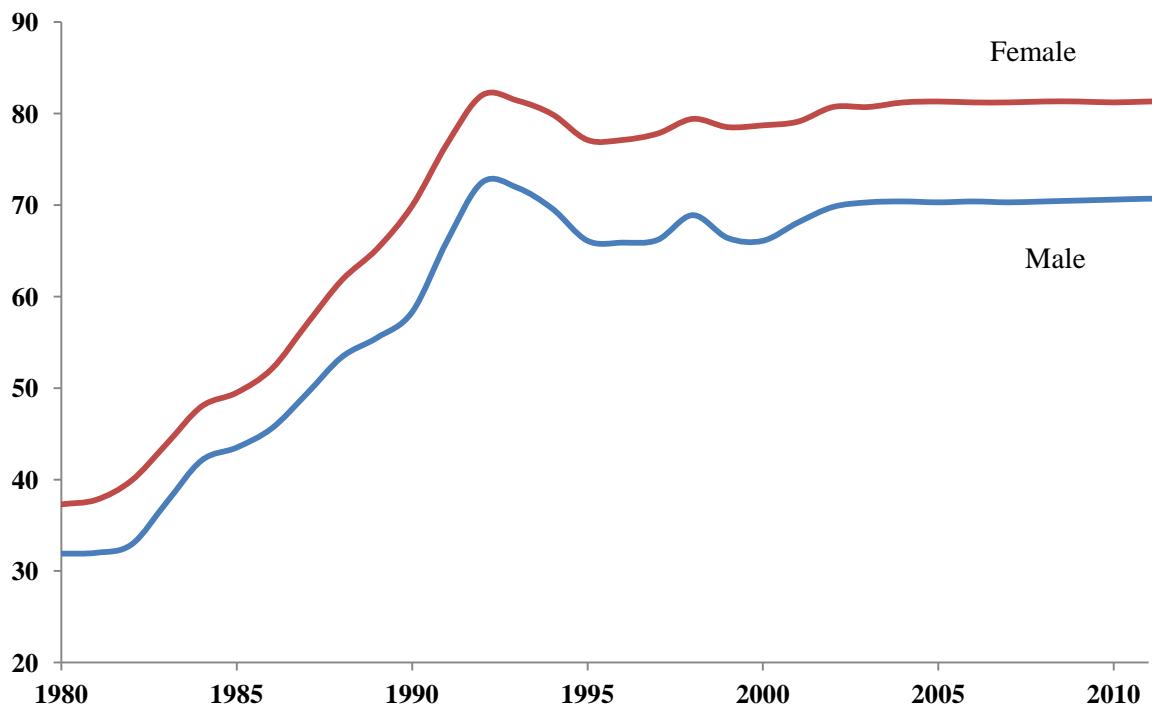
**Figure 5 Labour force participation rate, percent, 1978-2014**



Source: ABS (2014), *Labour Force, Australia, Detailed, Quarterly*, Nov 2014  
Catalogue No 6291.0.55.003

The labour force participation rate, the percentage of the working age population in the labour force (employed or unemployed) is shown in Figure 5. The participation rate for men fell almost continuously up until the boom of the early to mid 2000s before falling again post-GFC. For women the participation rate had been rising strongly but appears to have plateaued post-GFC. Wilkins and Wooden (2014) broke down these aggregate changes by age. They found that for males participation rates have been falling for younger ages (under 35 years) but rising markedly for older males (over 54 years). Participation rates have risen for prime-age (24-54 years) and for older (over 54 years) females. The reasons for these patterns are not clear but one reason is likely due to increased participation in education which lowers labour force participation in the labour force for younger people but the greater skill set that older workers now have means they can extend their workforce participation longer. Also likely to be important is that the number of jobs requiring manual labour have declined significantly while opportunities for part-time and casual work have increased, particularly in the service sector.

**Figure 6: Year 12 retention rate, percent**



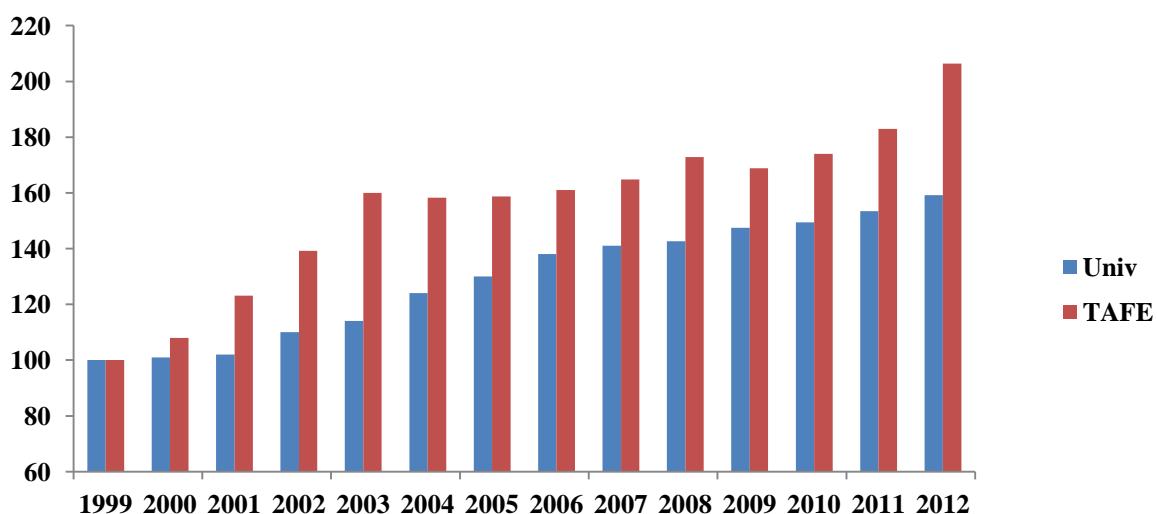
Source: ABS (2012), *Schools, Australia*, Cat No 4221.0

The changes in demand for labour, particularly with respect to skills, have largely been matched by changes in supply. As seen above there has been a growing supply of women in

the labour force which has been complementary to the fall in demand for those with strength and manual skills and growth in demand for those with cognitive and interactive skills.

Figure 6 shows the Year 12 apparent retention rates for males and females over time. The apparent retention (or simply retention rate) is the percentage of the cohort of students entering high school who are still in school until Year 12. The retention rate rose sharply as youth full-time employment opportunities declined and part-time jobs increased. The creation of jobs for young people that has accompanied the structural changes in the economy, particularly the growth in services such as retailing, restaurants and cafes, has been a major factor in allowing young people to invest in education and training. Since years of education is the single biggest factor determining the probability of employment (and unemployment), career prospects and income (Lewis 2015), the growth in part-time work for young people has had important positive impacts on young people and for human capital accumulation in Australia generally.

**Figure 7 Enrolments in tertiary education, 1999=100.**



Sources: Department of Education and Training (various years), *Higher Education Statistics*, <https://education.gov.au/higher-education-statistics>, NCVER (2014), VOCSTATS, *Students and Courses* <http://www.ncver.edu.au/>

The increase in the retention rate was further boosted by the huge expansion in TAFE and university places which occurred in the 1980s. Most young people, 80 percent of females and 70 percent of males, are now completing 12 years of schooling in Australia. Particularly noticeable is the higher retention rate for females than for males. The gender pattern of school

retention is reflected in participation in tertiary education- in universities women account for over 55 percent of all enrolments and are predominantly in areas of study most associated with service-based occupations.

## **The retail, restaurant and café; and hairdressing and beauty industries**

### **Coverage and data**

The industries covered by this report consist of industries defined by the Australian Bureau of Statistics (ABS) as follows:

ANZSIC Division G Sub divisions 3900-4399 Retail Trade .This industry includes firms mainly engaged in the purchase and on selling, the commission-based buying, and the commission-based selling of goods, without significant transformation, to the general public.

ANZSIC Class 4511 Cafes and Restaurants - consisting of units mainly engaged in providing food and beverage serving services for consumption on the premises. Customers generally order and are served while seated (i.e. waiter/waitress service) and pay after eating;

ANZSIC Class 9511 Hairdressing and Beauty Services. This industry consists of firms mainly engaged in providing hairdressing services or in providing beauty services such as nail care services, facials or applying make-up.

Important information relevant to this report is contained in *The Census of Population and Housing* (the Census) (ABS 2011 and various years), *The Labour Force Survey* (ABS 2015a). Some information regarding the industry over time is contained in *Retail Trade* (ABS 2015a) which provides quarterly estimates of turnover. *Business Indicators, Australia* (ABS 2012c) contains limited information but the industry categories are rather broad. Thus, they could be used with caution for some limited examination of the sectors over time. Some private sector organisations (see, for instance, IBISWorld) produce various estimates on the sectors. A major data source for an overview of the restaurant and café sector is an ABS *Survey of Cafe, Restaurant and Catering Businesses* conducted in 2006-07 (ABS 2008). This year can be regarded as ‘best case’ in terms of these businesses since it was characterised by a boom phase in the Australian economy, when consumer spending and confidence were at their height before the Global Financial Crisis which began in 2007 and followed by Global Recession in 2008 (Lewis et al 2010). These data are, however, now a little dated.

## **The economic environment**

The three relevant industries are part of the services sector. As noted previously the general pattern of growth observed in Figure 1 is common in rich post-industrial economies like Australia and reflects the ‘income elasticity of demand’ for output for services industries (Lewis 2015). Income elasticity is a term for the responsiveness of demand to changes in income. A good or service is ‘income elastic’ if, when income rises by, say, 10 percent demand rises by more than 10 percent. As households become richer they tend to spend a lower percentage of their income on basic goods and more on luxury goods and services, such as entertainment (including home entertainment), beauty treatments and eating out.

These goods and services are classified as ‘luxury goods’ and therefore also have high ‘price elasticities’ which means that demand is very responsive to changes in price, since consumption can be delayed or done without as opposed to ‘necessities’ for which consumption cannot be easily be done without. For luxury goods changes in price are very important. For these goods and services as the economy grows, demand grows more than for basic goods. However, businesses selling luxury goods are also more susceptible to economic downturns as consumers become more price conscious.

Household disposable income plus consumer and business confidence are very important to demand for output from the relevant industries. During the long period of trend growth from 1992 to just before the Global Financial Crisis (GFC) in 2007-08 there was strong trend growth in turnover for services industries but it is also noticeable that there has been significant fluctuation in turnover (Lewis 2015) implying increased business risk for these industries. The aftermath to the GFC has considerably increased risk for businesses. The GFC caused a marked fall in turnover in 2008 and the cash handouts given to households as part of the federal government in 2009 caused turnover to rise in 2009 (Garnett and Lewis 2010).

The future financial health of the relevant industries is uncertain. While the Australian economy has come through the Global Financial Crisis in reasonable shape, consumer confidence and uncertainty, as evidenced by increased household savings and reduced consumption, relative to household income, is still low. Economic commentators are divided on the prospects for the economy. Some point to the continuing strength of the Chinese economy, the relatively low level of government debt, low inflation and relatively low unemployment. Others point to Australia’s reliance on China as a major risk, especially as its growth rate moderates. The end of the construction phase of the primary sector, falls in iron

ore prices, a struggling export and import competing sector (due to the still high Australian dollar) and a sluggish domestic household consumption-reliant sector, are all factors causing concern. Strong doubts also remain regarding the ability of the Eurozone to solve its financial problems and the consequent international implications of failure (Lowe 2012). The seemingly sluggish response of consumption and investment to interest rate cuts by the Reserve Bank of Australia (RBA) also point to fragile consumer and business confidence.

Therefore, it can be said that the outlook for the retail, café and restaurant and hairdressing and beauty services industries is somewhat uncertain.

### **The retail industry**

The retail trade industry as defined in the Australia and New Zealand Standard Industrial Classification (ANZSIC) (ABS 2015) includes units mainly engaged in the purchase and/or on selling of goods, the commission based buying of goods, and the commission based selling of goods, without significant transformation, to the general public. The sector consists of sub divisions of businesses facing quite different business conditions, ranging from food retailing dominated by major firms and selling mostly necessities to flower retailing with no major players selling luxury items. The major drivers of demand are household disposable income and consumer confidence.

In 2013-14 there were 135 thousand businesses in the retail industry, the number declining from 144 thousand in 2010-11 (ABS 2015b). Table 1 provides summary data on the retail industry. The industry generates over \$380 billion per year in revenue and employs almost 1.3 million people, about 11 percent of Australian total employment and 15 percent of all service sector employment. The industry generates over \$40 billion in wages and 5 percent of Gross Domestic Product value added. Since the industry is largely involved in selling of goods without significant transformation much of total expenses (73 percent) is made up of purchases of goods. Industry value added (the difference between total sales revenue of an industry and the total cost of components, materials, and services purchased from other firms) is made up to a large extent (58 percent) by wages.

**Table 1 Retail industry, 2012-13.**

<b>Employment</b>			
Working proprietors and partners of unincorporated businesses	no.		39,811
Employees	no.		1,232,146
Total	no.		1,271,957
Full time	no.		669,530
Part time	no.		602,427
<b>Income</b>			
Sales of goods bought in and resold	\$m		352,521.3
Service income	\$m		20,607.0
Other Income	\$m		6,930.0
Total	\$m		380,058.3
<b>Expenses</b>			
Wages and salaries	\$m		40,435.4
Other labour costs	\$m		6,066.1
Purchases	\$m		264,471.6
Payments to contractors and other businesses for freight, cartage, delivery and transport services	\$m		4,719.4
Rent, leasing and hiring expenses			
Land, buildings and other structures	\$m		14,873.5
Other rent, leasing and hiring	\$m		1,206.4
Total	\$m		16,079.9
Other Expenses	\$m		31,648.4
Total	\$m		363,420.7
<b>Inventories</b>			
Opening	\$m		34,609.4
Closing	\$m		36,147.8
<b>Operating Profit before tax</b>			
Industry Value Added	\$m		18,282.0
<b>Operating Profit Margin</b>			
Wages (% of expenses)	%		4.8
Wages (% of value added)	%		11.1
	%		58.1

Source: ABS (2014) 86220DO001\_201213 Retail and Wholesale Industries, Australia, 2012-13, ABS (2009), *Labour Force, Australia*, Detailed, Quarterly, Nov 2014, Catalogue No 6291.0.55.003

## Hairdressing and beauty services

Firms in this industry primarily provide hairdressing or beauty services, such as manicures and pedicures, facials, skin treatments, tanning, make-up application, hair removal and non-medical hair restoration techniques. Haircutting, styling and colouring services account for the largest share of industry output. Haircuts might be thought of as a necessity, and thus demand relatively unresponsive to price and income (inelastic). However, this view does not take account of the fact that demand can be reduced by, say, having haircuts every five weeks rather than every month during economic downturns or more frequently if incomes increase or prices are reduced. Other beauty treatments might be regarded as luxuries (demand inelastic) and as incomes increase, or businesses become more price competitive, demand will increase.

**Table 2 Hairdressing and beauty services industry, 2014-15.**

<b>Businesses</b>	No.	21,777
<b>Employment</b>	No.	81,453
<b>Revenue</b>	(\$/m)	3,862.30
<b>Expenses</b>		
Rent	(\$/m)	227.7
Utilities	(\$/m)	61.8
Depreciation	(\$/m)	88.8
Other	(\$/m)	42.5
Wages	(\$/m)	2,485.6
Purchases	(\$/m)	528.8
Total	(\$/m)	3,437.7
<b>Industry Value Added</b>	(\$/m)	2,999.3
<b>Profit</b>	(\$/m)	424.6
<b>Profit Margin</b>	%	11.0
<b>Wages (% of expenses)</b>	%	72.3
<b>Wages (% of value added)</b>	%	82.9

Source: Derived from Gargano, (2015a) *Hairdressing & Beauty Services in Australia Industry Report*, IBISWorld

In 2014-15 there were estimated to be almost 22 thousand businesses in the hairdressing and beauty services industry employing over 81 thousand people. Businesses in this industry generate almost \$3.9 billion in revenue. The industry is extremely labour intensive with wages making up over 72 percent of total expenses and over 82 percent of total value added.

## Cafe and restaurant industry

Businesses in the cafe and restaurant industry serve food and beverages on the premises, and include licensed restaurants, cafes and coffee shops serving food and beverages to customers on premises, Bring your own (BYO) restaurants, licensed and BYO restaurants, and unlicensed restaurants.

**Table 3 Cafe and restaurant industry, 2014-15.**

<b>Enterprises</b>	No.	15,251.0
<b>Employment</b>	No.	154,658.0
Working proprietors and partners of unincorporated businesses	No.	10671
<i>Employees</i>	No.	
Salaried directors of incorporated businesses	No.	11135
Other	No.	
Permanent full-time	No.	32633
Permanent part-time	No.	26910
Casuals	No.	73308
Total	No.	132851
Total	No.	143987
 <b>Revenue</b>	( <b>\$m</b> )	16,027.7
 <b>Expenses</b>		
Rent	( <b>\$m</b> )	1,661.6
Utilities	( <b>\$m</b> )	326.3
Depreciation	( <b>\$m</b> )	450.7
Other	( <b>\$m</b> )	1,898.6
Wages	( <b>\$m</b> )	4,089.2
Purchases	( <b>\$m</b> )	6,225.5
Total	( <b>\$m</b> )	14,649.8
 <b>Industry Value Added</b>	( <b>\$m</b> )	5,916.4
 <b>Profit</b>	( <b>\$m</b> )	1,377.9
 <b>Profit Margin</b>	%	8.6
 <b>Wages (% of expenses)</b>	%	27.9
 <b>Wages (% of value added)</b>	%	69.1

Source: Derived from Australian Bureau of Statistics (2008), *Cafe, Restaurant and Catering Services, Australia*, Cat No 8655.0, Gargano (2015b) *Restaurants in Australia Industry Report*, IBISWorld, and Gargano (2015c) *Café and Coffee Shops in Australia Industry Report*, IBISWorld.

The cafe and restaurant industry has a low level of concentration with no single firm having

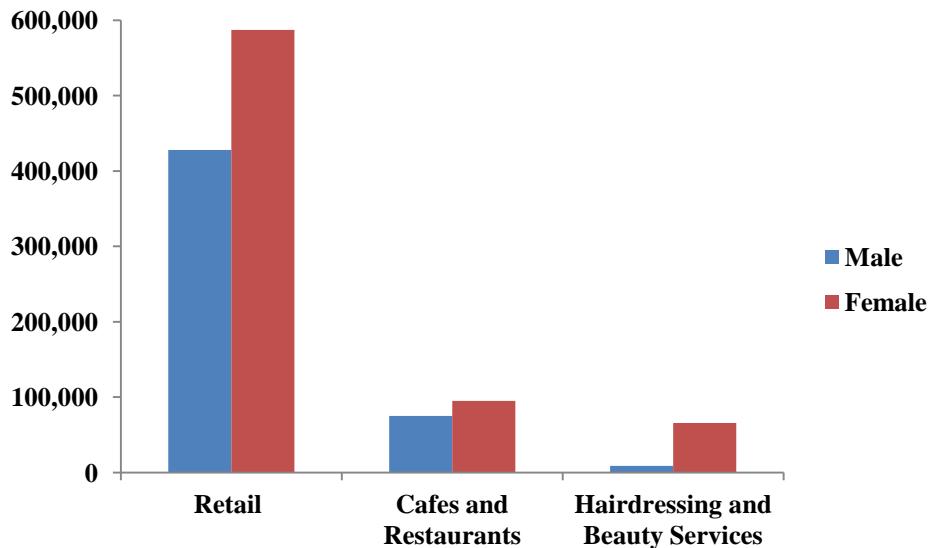
more than a 5 percent share of the market. The industry has a large number of single establishments and owner-operated restaurants and cafes. The industry is comprised mainly of small businesses, with the majority employing fewer than 20 people (Gargano 2015b, 2015c). The industry is, therefore highly competitive.

The outputs of the industry are very responsive to price and income (elastic) since they are luxury goods. When prices rise or incomes fall consumers can eat and drink out less or they can reduce consumption by, for instance, foregoing entrée or dessert with a meal or a muffin with coffee.

In 2014-15 there were over 15 thousand businesses in the cafe and restaurant industry employing almost 155 thousand people and generating over \$16 billion in revenue. The industry is very labour intensive with wages accounting for 28 percent of total expenses and 69 percent of value added. Average profit margin is 8.6 percent.

### **Industry workforce**

**Figure 8: Distribution of industry workforce, 2011.**

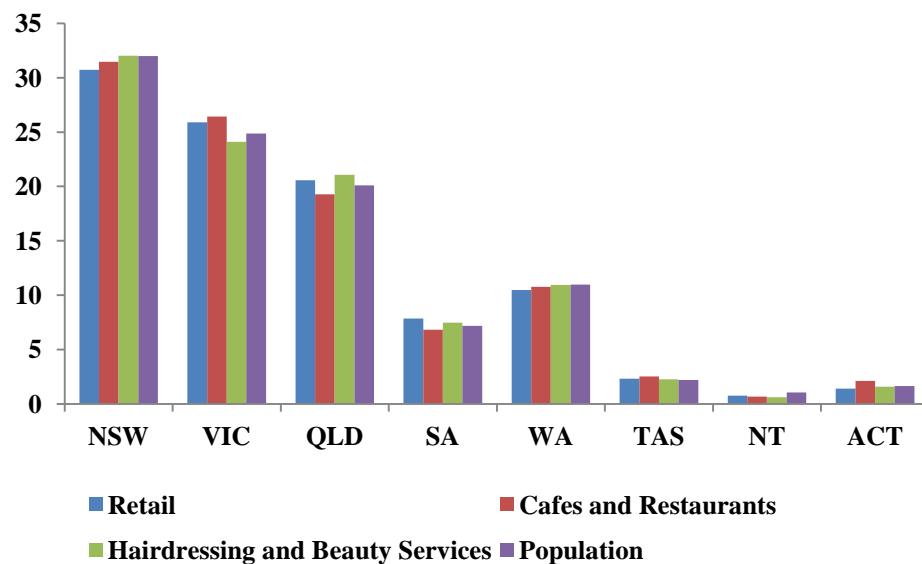


Source: Australian Bureau of Statistics (ABS 2011) Census of Population and Housing, 2011, unpublished.

According to the 2011 Census there were about 1 ¼ million people employed in the three industries – 1015 thousand, 170 thousand and 75 thousand in retail, restaurants and café; and hairdressing, respectively. In all three industries females make up proportionately more of the

workforce than males. This compares to the Australian workforce as a whole where less than 46 percent are female. Clearly, the three industries are a major source of employment for females.

**Figure 9: Distribution of industry workforce and population by state and territory, 2011**

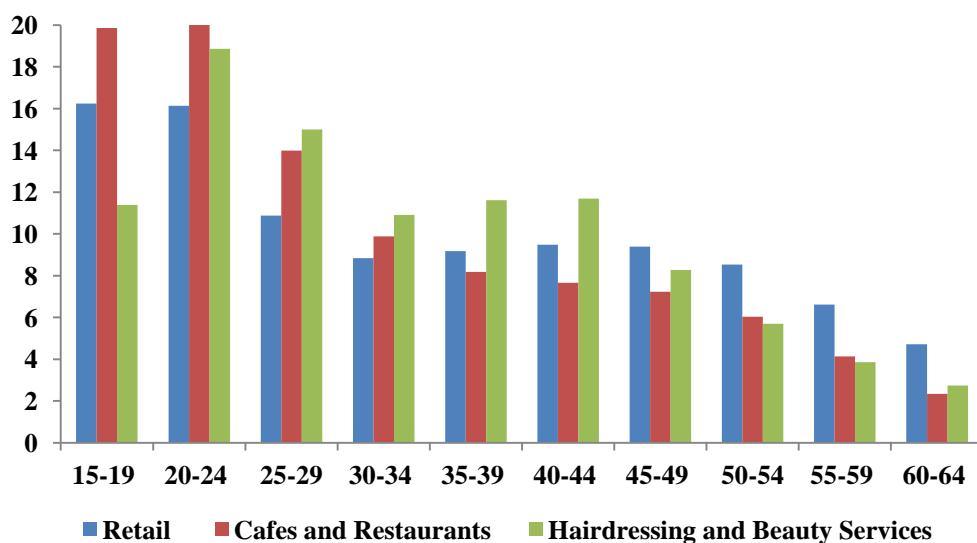


Source: Australian Bureau of Statistics (ABS 2011) Census of Population and Housing, 2011, unpublished.

The distribution of the industry workforce by state and territory largely maps the distribution of the population with over 55 percent of the workforce located in New South Wales and Victoria. New South Wales has a lower percentage than its population in retail and restaurants and cafes whereas Victoria has higher percentages of the respective workforces relative to population consistent with its ‘café and shopping’ culture reputation but a lower percentage employed on hairdressing and beauty than its population would suggest. Queensland and South Australia have lower percentages employed in restaurants and cafes and higher percentages in retail and hairdressing and beauty than implied by their respective populations. Western Australia’s workforce distribution for the three relevant industries is similar to that of New South Wales. The ACT has somewhat higher percentages employed in restaurants and cafes reflecting the relatively high average income population. However, it has fewer employed in retail and hairdressing and beauty than would be implied by the size of its population.

With respect to the distribution of the workforce by age, all three of the relevant industries have high percentages of their workforces who are young people. This is particularly the case for restaurants and cafes where over 40 percent of workers are under 25 years of age half of whom are teenagers. Retail has 36 percent of its workforce under 25 years of age, half of which are teenagers. Most of these are likely to be students since full-time jobs for those under 19 are rare in Australia (ABS 2014). Hairdressing and beauty has a relatively young workforce although only 11 percent are teenagers. This is due to hairdressers being required to be qualified tradespersons with individuals defined as those who have a level of skill commensurate with an Australian Qualifications Framework (AQF 2009) Certificate III or higher qualification (Lewis and Corliss 2010). Many of the teenagers in the workforce will be serving apprenticeships and studying at TAFE colleges.

**Figure 10: Distribution of industry workforce by age, 2011**



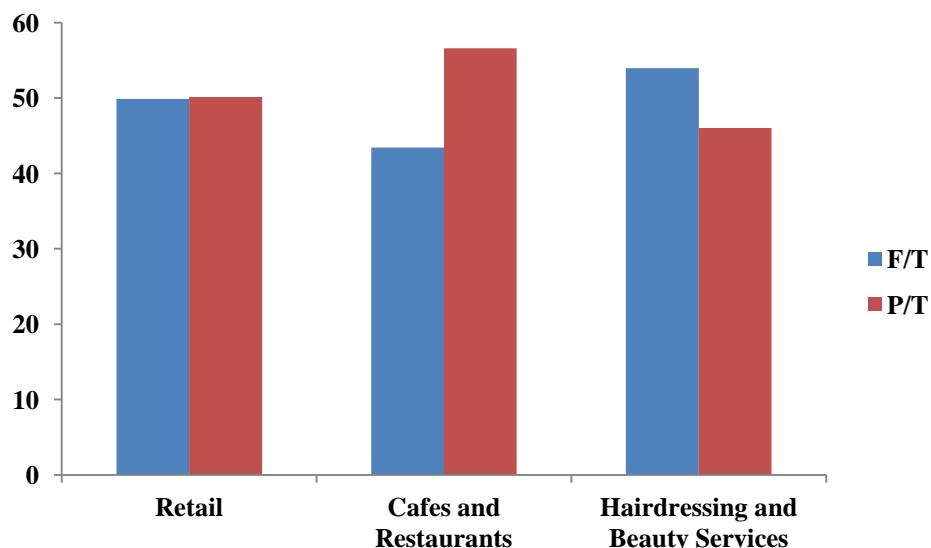
Source: Australian Bureau of Statistics (ABS 2011) Census of Population and Housing, 2011, unpublished.

The relevant industries are characterised by the importance of part-time employment. In retail just over a half of workers are employed part-time. However, the incidence of part-time work is quite different for females than for males. The 2011 Census reveals that for males employed in retail 33 percent work part-time whereas for women part-time work makes up 58 percent of employment. In restaurants and cafes the incidence of part-time work is the highest

of the three industries and greater than for the services sector as a whole. Almost 57 percent of workers are employed part-time. Of females employed in this industry 65 percent are employed part-time whereas for males 40 percent are employed part-time. In hairdressing and beauty services most workers (54 percent) are employed full-time. Most males (70 percent) are employed full-time but for females there are approximately equal numbers working full-time and part-time.

The above relates only to total numbers employed at a point in time. It does not take account of the importance of part-time employees to businesses at different times of the day, days of the week or time of year. What can be surmised is that part-time employment is particularly important for the relevant industries' businesses and, particularly for jobs for women.

**Figure 11: Distribution of industry workforce by full-time and part-time status, 2011**

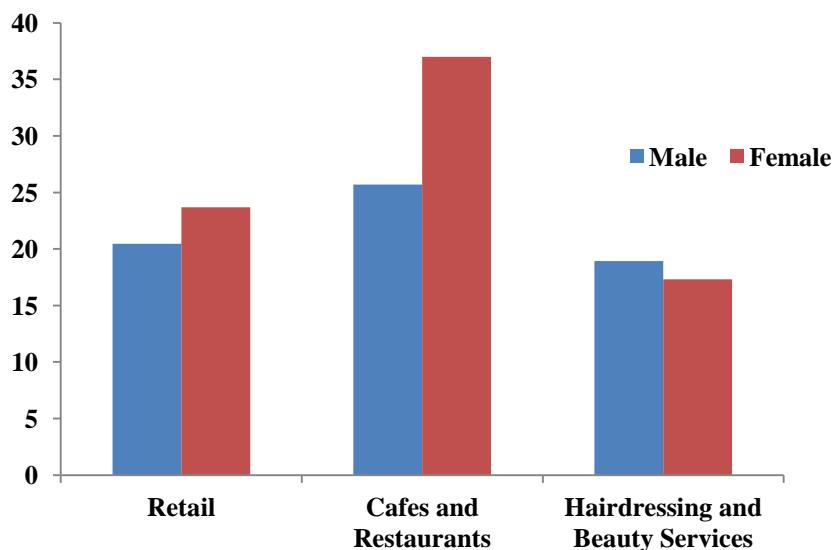


Source: Australian Bureau of Statistics (ABS 2011) Census of Population and Housing, 2011, unpublished.

The relevant industries are an important source of employment for students. Almost 300 thousand students were employed in the three industries in 2011. Students made up over 45 percent of those employed in retailing, 60 percent of those employed in cafe and restaurant and almost 40 percent of those employed in hairdressing and beauty services. The hairdressing and beauty services industry differs somewhat from the other two industries in that workers are generally qualified tradespersons or apprentices whereas in retail and cafe and restaurant part-time student workers are likely to studying courses unrelated to their

current job. In the three industries combined the majority (61 percent) of students were female. Over 80 percent of all students employed in the relevant industries are studying full-time.

**Figure 12: Students as a percentage of the workforce, 2011**



Source: Australian Bureau of Statistics (ABS 2011) Census of Population and Housing, 2011, unpublished.

In summary, the retail, café and restaurant; and hair and beauty services industries are major sources of employment in Australia responsible for over 1 ¼ million jobs. The industries are major employers of women and young people, particularly students. Many of the jobs in the relevant industries are part-time providing the flexibility required in demand for labour in these service sector industries. The availability of part-time employment also allows students and people with families to balance work, education and family commitments. The retail, café and restaurant; and hair and beauty services industries are, thus, vital in facilitating investment in human capital and workforce participation in families with children; and, hence, productivity. They also provide an important entry point for young people into their first job and for women returning to work after having children.

## **Penalty rates**

The penalty rates which apply in the relevant industries for work on Sundays and public holidays are taken here to be as specified in the Retail General Industry Award (FWC 2015a), the Restaurant Industry Award 2010 (FWC 2015c) and the Hair and Beauty Industry Award 2010 (FWC 2015b). These awards specify penalty rates as follows:

### Permanent employees

- an additional 100 percent on Sundays and an additional 150 percent on public holidays in the retail and hair and beauty services industries, making pay rates 200 percent and 250 percent, respectively, of the standard wage rate; and
- an additional 50% on Sundays and an additional 150 percent on public holidays in the café and restaurant industry, making pay rates 150 percent and 250 percent , respectively, of the standard wage rate.

### Casual employees

- an additional 75 percent on Sundays and an additional 150 percent on public holidays in the retail and hair and beauty services industries, making pay rates approximately 160 percent and 220 percent, respectively, of the standard casual loaded wage rate for these employees; and
- an additional 25-50 percent on Sundays (depending on an employee's grade) and an additional 125 percent on public holidays in the café and restaurant industry, making pay rates approximately 120-140 percent and 200 percent , respectively, of the standard casual loaded wage rate for these employees.

## **Employment effects**

Turning to the impact of penalty rates on employment it is first necessary to address the question of what determines employment in any industry (and the wage paid). The simple answer is demand and supply of labour. The matter is however complicated by institutional arrangements governing employment such as legally binding minimum wages and employment conditions (including penalty rates).

Businesses determine the demand for labour. The demand for labour is generally thought to depend on the wage rate, or more correctly the costs of employing labour which typically includes many other costs apart from the wage (see for example, Hamermesh 1993, Lewis and Seltzer 1996, Lewis and MacDonald 2002). A firm's decisions about how much output to produce and how much labour to hire are made *simultaneously*. Firms hire extra labour when the value of the extra output produced is greater than the wage. Firms will only increase output if activities which were not previously profitable are made profitable.

One of the corner-stones of economics is the Law of Diminishing Returns. This states that each extra worker employed produces less output than the worker previously employed given that all other inputs are held constant. In the case of most service sector businesses such as shop, hairdressing salon or restaurant, for example, if the size of the premises, number of cash registers, tables, counters, or driers etc remain fixed each successive employee hired (or extra hour worked) will result in a lower increase in output than the one before. Businesses will employ more people (or increase hours of employment) as long as the extra revenue generated exceeds the extra cost of employing them. Therefore, extra output and extra employment requires a fall in labour costs and conversely a rise in labour costs will make otherwise profitable activities no longer profitable so firms hire less people and produce less.

Although there has been considerable debate regarding the impact of wage changes on employment, Australia is fortunate in having experienced a unique 'controlled experiment' during the period of the Prices and Incomes Accord (the Accord). The impacts of the Accord have been extensively documented (see, for instance Chapman and Gruen, 1991; and Lewis and Spiers, 1990). Modeling by Lewis and Kirby (1987) estimated that the Accord resulted in a growth in real wages of 10 percent less than would have been the case without it and that this wage moderation raised employment by 8 percent above what it would have been without wage restraint.

Isolating the impacts of changes in award wages are fraught with difficulty and is largely responsible for the lack of consensus on the employment impacts of changes to imposed wages such as awards, including minimum wages. It is very difficult to estimate the impact of minimum wage changes, such as penalty rates, on labour demand since there are factors operating in the whole economy. In particular the economy has been growing very strongly for over 20 years and this would increase demand in minimum wage jobs even with increasing minimum wages. By contrast the Global Financial Crisis (GFC) and its aftermath

had a negative effect on employment far greater than any effect of changes in award wages such as the freeze in the minimum wage for 2009/2010.

Lewis (2005) attempted to measure the impact of minimum wage changes by controlling for the changes in labour demand and wages in the economy as a whole. He compared the percentage changes in wages and employment in the minimum wage sector and the economy as a whole over the ten years 1994 to 2004. The minimum wage sector was taken to be accommodation, cafes and restaurants, health and community services. Over the period real wages in the minimum wage sector rose by 7.7 per cent while employment rose by 29.9 per cent. In the economy as a whole real wages rose by 18.2 per cent and employment by 22.4 per cent. Looking at the differences between the growth rates in the two sectors, real wages grew by 10.5 per cent less in the minimum wage sector. That is, minimum wage labour became *cheaper relative to labour generally*. Standard economic theory would predict an increase in demand for minimum wage labour relative to labour generally and this is precisely what was observed. Demand for minimum wage labour rose by 7.5 per cent more than for the economy as a whole.

Leigh (2003) also makes use of comparisons between the whole economy and a particular segment of the labour market where wage changes have been different to the rest of the economy. Specifically he estimates the impact of raising the minimum wage on employment using the Western Australia statutory minimum wage increases during the period 1994-2001. The timing and magnitude of these increases differed somewhat from the rest of Australia. His results suggest that a 10 percent rise in the WA statutory minimum wage would result in a 1.3 percent fall in employment.

To get to grips with the effects of an imposed wage on different types of labour it is necessary to dig deeper into the operations of the labour market. In reality there is not a single labour market but rather very *many labour markets* each with their own supply and demand. An important characteristic of the multitude of labour markets is *substitutability*. Although it is common, particularly in the professions, to think of occupations being rigidly defined, in practice there is a great deal of substitutability of workers between and within industries and occupations.

Lewis (2014) uses the case of a cafe/restaurant to illustrate the potential for, or even necessity of, substitution. Consider a hypothetical, but realistic, example. A cafe is staffed by a barista

responsible mainly for the drinks, a cook who produces sandwiches and light meals; and various waiters/waitresses. The owner manager does a whole range of tasks such as keeping the accounts and other paper work, collecting supplies, hiring staff and doing virtually any of the jobs of other staff should the need arise. During most of the day any staff member will be doing their main task but at peak times, or when colleagues are on breaks, the owner or other staff members can take on different roles. The waitress can only work between 9am and 3pm because she needs to drop off and pick up children from school. Mostly students are employed the rest of the time because they can fit work in around their classes. Students are particularly keen to work on weekends since it doesn't clash with study while some people with children who work in the cafe/restaurant, generally, find weekend work clashes with family commitments. For some, however, weekend work can be 'family friendly' since a partner can look after children and avoid the child care costs incurred when both partners are working during the week.

This example can easily be extended to most businesses in the service sector with some modifications depending on the particular industry or business. For instance, in hair and beauty salons owners can substitute more of their own labour for that of employees when needed. In addition, it would be expected that less skilled workers, such as apprentices can be substituted, where possible, for skilled hairdressers undertaking certain tasks.

Most empirical studies of individual labour markets point to the high degree of substitutability, with respect to demand, between types of labour. There is also strong evidence that, given the degree of substitutability, the demand for labour in more narrowly defined labour markets is highly responsive to *relative wages* (Hamermesh 1993, Lewis 1985, Daly *et al* 1999). Also, generally, the lower skilled the worker then the more responsive is demand to relative wages (Hamermesh 1993).

The economic theory explaining the impact of wage (labour cost) changes is well known in the literature (see, for instance, Lewis 2014). The impact of a 1 per cent rise in real wages on demand for labour, the *elasticity of demand for labour*. It depends on the degree to which labour can be replaced by other inputs (which is known as the *elasticity of substitution*), labour's share of total costs and how responsive is demand for output to changes in prices (which is known as the *elasticity of demand for goods and services*). The precise formula (which sheds a lot of light on the relationship between wages and demand) for the long run elasticity of demand can be shown (Hamermesh 1993) to be:

$$e = -(1-s) \sigma + s \eta$$

where

e is the elasticity of demand for hired labour (negative)

s is the proportion of hired labour costs in the total cost of production

$\sigma$  is the elasticity of substitution between hired labour and other inputs (positive)

$\eta$  is the elasticity of demand for output (negative).

In words what this formula says is that:

- a. when wages rise this causes an increase in costs which firms must adjust to. The bigger the share of total costs which are hired labour costs then the larger the impact on firms. Firms will attempt to replace higher cost labour with other inputs, such as family and owner's labour, and demand for hired labour will fall. Their ability to do this will depend on how easily hired labour can be replaced by other inputs, the *elasticity of substitution*, and how labour intensive the production process is (*labour's share of total costs*).
- b. firms also attempt to pass on the increased costs to buyers of their products. If demand for these products is very price sensitive (high *elasticity of demand for output*) then even small cost increases cause large falls in demand for output and demand for labour. Output demand tends to be elastic where there is a high degree of competition and consumers regard goods and services as relative luxuries. If demand for these products is relatively insensitive to price (low *elasticity of demand for output*) then relatively small cost increases cause only small falls in demand for output and demand for hired labour. Low elasticity of demand is usually found where there is little competition and consumers regard goods and services as relative necessities such as basic food and shelter. Nevertheless, whatever the size of the response, wage rises always cause a fall in demand for hired labour.

The above formula is for the long run elasticity of labour demand. The long run is defined as that period of time over which firms can vary all of their inputs, and to increase or decrease the size of its physical plant or premises.

There is also a corresponding short run elasticity of labour demand (Hicks 1932). The short run is defined as that period of time during which at least one of the firm's inputs is fixed. For instance, in the short run the size of the shop or restaurant cannot be decreased or increased.

The short run elasticity is:

$$e = \sigma \eta / (\sigma s - [1-s] \eta)$$

Using this above framework the impact of wage changes in a particular industry can be predicted by making reasonable assumptions about the parameters,  $s$ ,  $\sigma$  and  $\eta$ . We have seen above that in the relevant industries industry hired labour accounts for a higher percentage of total costs ( $s$ ) than for other industries, the degree of substitution between employees ( $\sigma$ ) is high and, since restaurant meals are generally thought to be luxury good (Hubbard et al 2011), then  $\eta$  is high.

Providing precise estimates of the impact of wage changes on employment in an industry is difficult because there are few empirical studies available for Australia. However, making some reasonable assumptions, based on the following Australian and overseas evidence, one can provide some broad estimates.

The empirical work for Australia on the degree of substitution between different types of labour has largely arisen out of the debates regarding the appropriate rates for junior wages. In an early study for the Bureau of Labour Market Research, Lewis (1985) estimated the elasticities of substitution between young and adult workers by gender. He concluded that there was a very high degree of substitutability between different categories of labour and hence a high negative effect of wages on employment.

A well-known Australian study undertaken for the Productivity Commission (Daly et al 1998) uses econometric analysis of a large cross sectional data set (the Australian Workplace Industrial Relations Survey 1995) to isolate the influence of wages from the influence of other factors affecting youth employment. It found there is a significant substitution between youth and adult labour and hence a negative relationship between youth employment and youth wages. The best estimates suggest that a 1 per cent increase in youth wages would lead to a decrease in youth employment of 2-5 per cent in industries employing a relatively high proportion of youth.

Lewis and McLean (1999) carried out a simulation exercise on the effects of the ‘adults at 18’ proposal to abolish junior rates of pay for those over 18 proposed by the ACTU in the last junior wage case. Assuming elasticities of substitution of 1 between hired workers of different ages (a number far more conservative than those estimated by Lewis, 1985 and Daly et al, 1998) they found that the effects of the proposal would have been to significantly reduce employment of 15, 16 and 17 year olds.

While there are a number of studies providing evidence on the elasticity of substitution for hired labour there is little evidence of the magnitude of the elasticity of demand for output of the relevant industries. Nevertheless we can be reasonably sure of the range of magnitudes of these elasticities.

There are no Australian studies on the elasticity of demand for the retail sector. In any case, this large industry is composed of many sub-sectors with quite different elasticities of demand. For instance demand for groceries is likely to be less responsive to price (inelastic) than, say, electronic goods or DVDs. For this reason, in the exercise on which the estimates below are calculated, a range of elasticities of demand for output are considered, from a very low -0.1 to a relatively high, but plausible, -1.0.

Similarly, for the hairdressing and beauty industry the same range of output elasticities is used although intuitively it would be expected that the elasticity would be large (greater than -1 in absolute magnitude) since the outputs of this industry would be regarded as luxury goods and services.

There are few studies on the elasticity of demand for the output of the café and restaurant industry (Lewis 2014) but they all conclude that it is large which concurs with the general view among economists that ‘eating out’ is a luxury good. Studies that have been published contain the estimated elasticities of demand for restaurant meals at -0.9 (Divisekera 2007), -1.46 (Eisenhauer and Principe 2009), -2.3 (Andersen et al 1997) and between -1.49 and -3.8 (Jensen and de Boer 2006). The Divisekera (2007) study was for tourist demand so is likely to be lower than for demand generally since tourists have fewer substitutes (alternatives to eating out).

Studies (see, for instance Cardoso et al 2012) have considered the substitution of labour over times of the day or week as a result of differences in labour costs. For instance, firms may

redirect production to those periods when overtime or penalty rates are not paid in order to reduce labour costs. The degree of substitution has been found to be small (Cardoso et al) for industries as a whole and the possibilities for reorganising production in most service sector industries like those in question would appear to be low. However, it is also possible that some ‘demand shifting’ of output takes place to weekdays and away from Sundays and public holiday demand by consumers. For instance, if a restaurant or hairdresser is closed on Sunday, or charges higher prices, customers may shift their demand to a weekday. In this case the impact of penalty rates is to reallocate employment to weekdays. Unfortunately there are little available data on this and so it is difficult to predict what the effect of ‘demand shifting’ is on employment. Nevertheless, it is highly likely that the inconvenience imposed on customers of not being able to purchase goods and services at times they prefer does impose costs and would reduce demand.

On the basis of the above studies we can reasonably assume that  $\sigma$ , the elasticity of substitution for hired labour, is between 1 and 3; however, for completeness an elasticity of -0.5 is included in the analysis to account for the possibility that there is a lesser degree of substitution than suggested by the above studies; and  $\eta$ , the price elasticity of demand for relevant industries is between -0.1 and -3.

The table below shows the estimated employment effects of imposing penalty rates on Sundays and public holidays under different assumptions. The full range of estimates is not shown because under all scenarios other than those in the table the impacts on labour demand are so large that firms would choose not to employ any hired labour.

The short run elasticities show the effect of employment if firms do not change the size of their premises or change the amount of capital they employ. The long run elasticities show the effect on employment if firms change their capital stock and/or vary the size of their premises. There are likely to be further employment effects beyond those indicated in Table 4 if firms, in response to easing restrictions on firms’ abilities to reorganize labour and capital, introduce new technologies. Unfortunately, it is not possible to predict what these effects would be.

Note that the penalty rates for casual employees in cafes and restaurants working on Sundays differ depending on the employee’s grade. The estimates in the table are for casual employees on the lowest grade.

**Table 4a Estimated employment effects of penalty rates for Sunday and public holiday work – permanent employees**

Retail			Assumptions		Public holiday	
	$\sigma$	$\eta$	Sunday		LR	SR
			LR	SR		
Retail	0.5	-0.1	78	87	66	80
	0.5	-0.5	50	50	25	25
	0.5	-1	16	24	*	*
	1	-0.1	62	86	43	79
	1	-0.5	35	41	2	11
	> 1	> -0.5	*	*	*	*
Hairdressing & Beauty	0.5	-0.5	50	50	25	25
	0.5	-1	9	15	*	*
	1	-0.1	75	88	62	82
	1	-0.5	42	45	12	18
	> 1	> -0.5	*	*	*	*
	Cafes & Restaurants					
Cafes & Restaurants	0.5	-0.5	75	75	25	25
	0.5	-1	58	62	*	*
	0.5	-2	23	48	*	*
	1	-0.1	81	93	43	79
	1	-0.5	67	70	2	11
	1	-1	50	50	*	*
	1	-2	16	24	*	*
	2	-0.5	52	67	*	*
	2	-1	35	41	*	*
	> -1	*	*	*	*	*

Note: \* implies firms will choose to hire no permanent employees.

Source: Author's estimates

**Table 4b Estimated employment effects of penalty rates for Sunday and public holiday work – casual employees**

Retail	$\sigma$	$\eta$	Sunday		Public holiday	
			LR	SR	LR	SR
	0.5	-0.1	86	92	73	84
	0.5	-0.5	70	70	40	40
	0.5	-1.0	49	54	*	*
	1.0	-0.1	77	91	54	83
	1.0	-0.5	60	64	21	29
	1.0	-1.0	40	40	*	*
	> 2	> -1	*	*	*	*
<b>*Hairdressers</b>			<b>LR</b>	<b>SR</b>	<b>LR</b>	<b>SR</b>
	0.5	-0.1	89	93	79.8	86.1
	0.5	-0.5	70	70	40.0	40.0
	0.5	-1.0	45	48	*	*
	0.5	-2.0	*	20	*	*
	1.0	-0.1	84	92	69	85
	1.0	-0.5	64	67	29	34
	1.0	-1.0	40	40	*	*
	> 2	> -1	*	*	*	*
<b>Restaurants</b>			<b>LR</b>	<b>SR</b>	<b>LR</b>	<b>SR</b>
	0.5	-0.1	95	97	77	86
	0.5	-0.5	90	90	50	50
	0.5	-1.0	83	84	15	23
	0.5	-2.0	69	79	*	*
	1.0	-0.1	92	97	62	86
	1.0	-0.5	86	88	34	40
	1.0	-1.0	80	80	*	*
	1.0	-2.0	66	69	*	*
	2	-0.5	81	87	*	*
	2	-1	74	76	*	*
	2	-2	60	60	*	*

Note: \* implies firms will choose to hire no permanent employees.

Source: Author's estimates

Tables 4a and 4b can be interpreted as follows. The first two columns of numbers are the assumed elasticities of, respectively, substitution and output demand. The next two columns are, respectively, the long-run and short-run demand for labour (employment) effects of imposing penalty rates for working on Sundays. The final two columns are the estimated employment effects for penalty rates on public holidays. For example in Table 4a, the first row of numbers shows that for permanent employees with elasticities of substitution and output, respectively, of 0.5 and -0.1 penalty rates on Sunday would reduce demand for hired labour in retail to 87 percent of what it would be without penalty rates in the short-run and 78 percent in the long-run. For public holidays the effect of penalty rates is estimated to reduce demand for hired labour in retail to 80 percent and 66 percent, respectively, in the short-run and long-run, of what it would be without penalty rates.

Table 4a indicates that in all cases employment of permanent employees is less with penalty rates than would be the case if standard rates of pay were to be paid. The employment effects in the cafe and restaurant industry are significantly less than for the other two industries because the penalty rates are less. For all three industries the negative effects on employment of penalty rates are much greater for public holidays than for Sundays.

The estimated employment effects in table 4b for casual employees show similar negative effects on employment to those for permanent employees. The effects are somewhat less than for casuals than for permanent employees because the penalty rates are somewhat lower for casuals. Nevertheless the negative employment effects are significant and large for reasonable sets of assumptions. The estimated employment effects for cafes and restaurants of Sunday penalty rates are less than for the other two industries because penalty rates for this industry are lower than for the other two. Interestingly, the reduction in penalty rates arising from the Fair Work Commission's 2014 decision to reduce penalty rates for some casual employees in the cafes and restaurant industry (FWC 2014b) is estimated to have had significant positive employment effects.

In all scenarios there are significant negative employment effects of penalty rates. Most importantly, in all three industries the estimated effects of penalty rates with an output elasticity of more than -0.1 (in absolute value) and/or an elasticity of substitution greater than 0.5, a set of reasonable assumptions, businesses will choose to employ no hired labour on

public holidays. For all goods and services, except perhaps sales of basic groceries, the elasticity of demand for goods and services is highly likely to be greater than -0.1 (in absolute value) and empirically for restaurants has been shown to be well over -0.5 (Lewis 2014).

Several possibilities suggest themselves. Businesses will close on these days, make greater use of owner and family labour, or may choose to hire the absolute minimum amount of hired labour if they think it important to remain open as part of their business strategy; or are contractually obliged to open in, for instance, shopping malls.

## **Are penalty rates relevant to the modern Australian economy?**

Penalty rates by their very name imply that businesses must pay a penalty for imposing conditions which are said to disadvantage employees. However, penalty rates have their origins in a labour market quite different to that of much of the Australian labour market today. The Australian economy used to be characterised by mostly males working full-time in industrial jobs. There was little part-time or casual work. Working married women and jobs with flexible hours were rare (Norris et al 2004). Most retail outlets shut at midday on Saturday and reopened on Monday. The weekends were for many the only time available for socialising, recreation, participating in sport and worship. The Australian economy has undergone significant structural change over the past three decades as discussed earlier.

It would be thought that for a modern service-based economy, such as Australia, imposing higher wages (penalty rates) when the demand for services is greatest is something of an anomaly. Here it is argued that penalty rates have significant negative effects on the economy. Industries particularly affected by penalty rates, namely the retail, hairdressing and beauty; and the café and restaurant industry have been used as examples to illustrate these effects.

Penalty rates have their origins in the ‘old economy’. The thinking behind penalty rates is encapsulated in the original decisions of the Commonwealth Court of Conciliation and Arbitration (CCCA). For instance:

“..the (extra rate for Sunday work) is given because of the grievance of losing Sunday itself – the day for family and social and religious reunion, the day on which one’s friends

are free, the day that is the most valuable for rest and amenity under our social habits.....

The norm of work should be six week days and Sundays free, the departure from the norm should be two time-and-a half rates, which is equivalent to one double rate.” (CCCA 1919)

and:

“Saturday, it is said, is the great day of recreation, while Sunday is the day of religious observance and family reunion. Saturday is the day on which competitive sports and various forms of organised social activities and public entertainment are held, as well as being the day which by common usage has come to be set aside for individual recreation in outdoor activity.” (CCCA 1947)

For some, very much the same logic applies today to a very different economy. For instance this view is encapsulated in this speech in the New South Wales parliament:

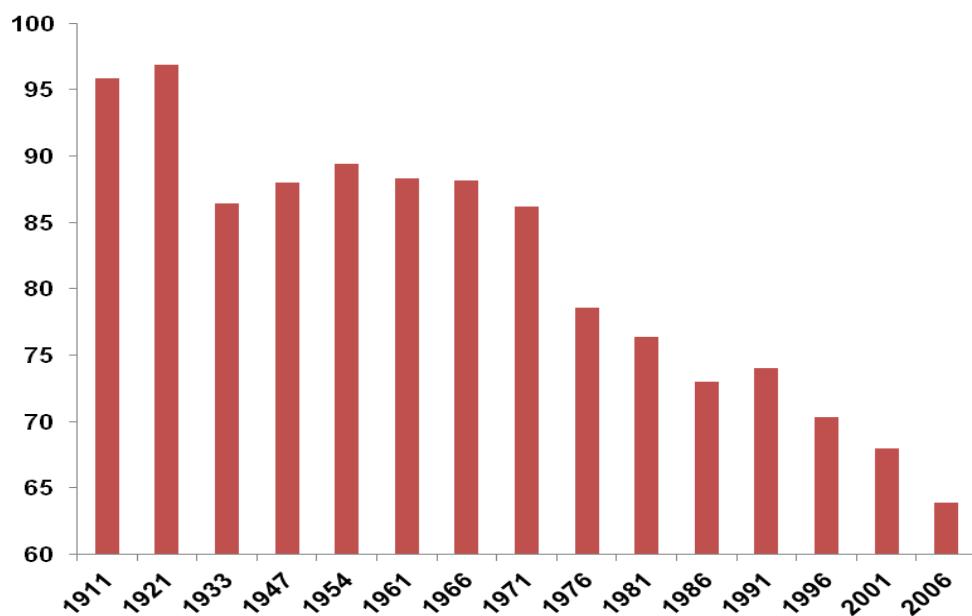
“Shift loadings and penalty rates for work in ordinary time on weekends and work outside the normal span of hours are intended to compensate for the inconvenience associated with working unsociable hours. Work after 5.30 p.m. is generally regarded as being in unsociable hours, and has a negative impact on both personal and family wellbeing. With a higher female participation in the work force, the pressures on family interaction are now greater. For individuals this pressure has increased with more work being performed during unsociable hours.”

and:

“Employees are less inclined to work on Saturdays and Sundays because they are dominant days for sport, leisure, community activities and religious celebrations. Time off during the week does not compensate for time lost on Saturdays and Sundays. This is the reason workplace arrangements have always recognised and endorsed penalty rates in the form of higher hourly payments for these days. Working unsociable hours interferes with family and personal commitments and has a negative impact on family relations, family and individual wellbeing.” (D’Amore 2005).

While it may well have been the case that “Sunday is the day of religious observance” once, this is only true of a minority of Australians today. Data compiled from various sources for the National Church Life Survey (NCLS 2010) indicate that while over 60 percent of Australians consider themselves Christians, this has fallen from over 96 percent in 1911 (Figure 13).

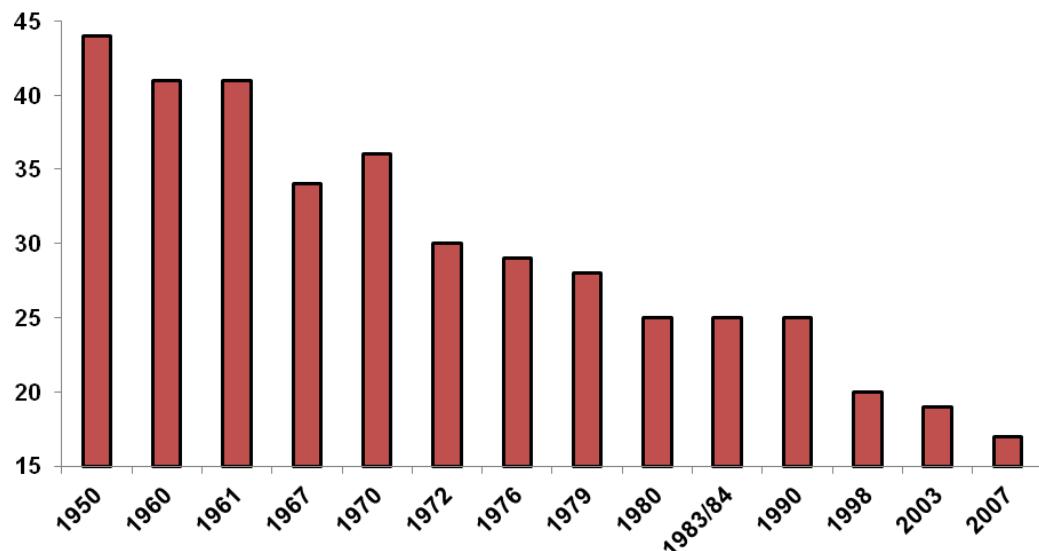
**Figure 13: Christian affiliation, 1911 to 2006, percent of population.**



Source: National Church Life Survey (NCLS 2010) based on Censuses of Population and Housing.

According to the National Church Life Survey (NCLS 2010) the number attending church regularly fell from 44 percent in 1950 to 17 percent in 2007 (Figure 14). Clearly, Sunday, for the majority of Australians, is not a day of religious activity. According to the NCLS (2010) regular church attendance is concentrated among certain demographics. about half of church attenders are employed, 28 percent are employed full-time, 14 percent are part-time and 9 percent are self employed. 30 percent are retired, reflecting the older age profiles of attenders. Around 15 percent indicate that they are performing full-time home duties or family responsibilities and 9 percent are students. Around 3 percent are unemployed.

**Figure 14: Regular church attenders, percent of population.**



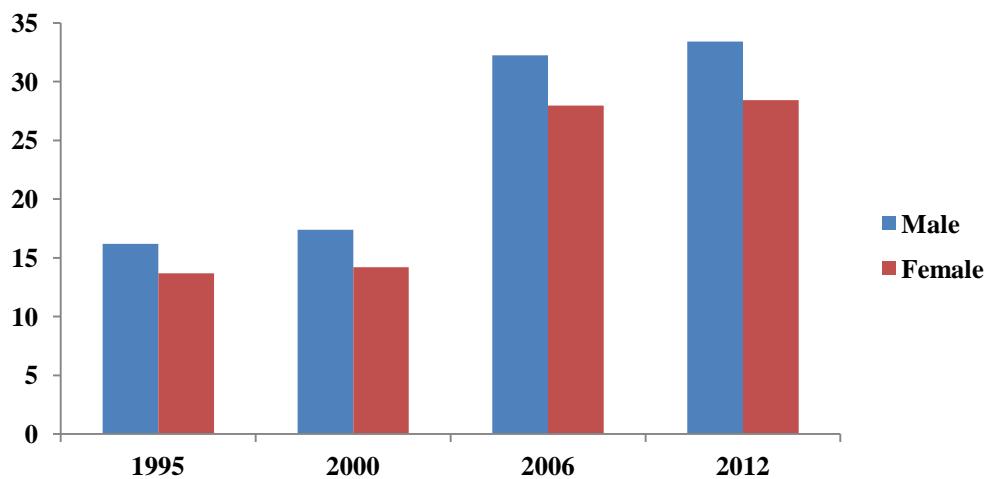
Source: National Church Life Survey (NCLS 2010)

Among young people, although the age group 15-19 years represents 9 percent of the population they make up less than 6 percent of church attenders. For the age group 20-29 the respective percentages of the population and church attenders were 17 and 9 percent respectively.

### The value of time

While the majority of employees are still in jobs where employment is usually ‘Monday to Friday’, weekend working has become far more common in Australia. In 2012, 68 percent of males and 53.5 percent of females worked in jobs usually requiring work attendance between Monday and Friday and these percentages were similar to those for 1995 ABS (2013). However, the number undertaking any weekend work in 1995 was less than 16 percent for males and 14 percent for females (Figure 15). By 2012 there were 33 percent of male employees and 28 percent of female employees reporting working some weekends or every weekend.

**Figure 15: Employees working some weekends in main job, percent of all employees.**



Source: Australian Bureau of Statistics (various years), *Working Arrangements, Australia*, Cat No 6342.0.

It can be concluded that the traditionally held view regarding weekends has for many been replaced by many as a time for employment.

The ABS produces estimates of individuals' and households' time use including time spent on leisure activities. The ABS (2008a) definition of sport and outdoor activity includes organised and informal sport, exercise, walking, fishing, hiking and holiday travel and driving for pleasure. According to the ABS (2008), (Table 5 below), the amount of time spent on sport and outdoor activity (25 minutes per day) was the second most popular activity for men in 2006.

However, audio/visual media (154 minutes per day) far exceeds time spent on sport. For women, time spent on sport and outdoor activity (17 minutes per day), again was eclipsed by time spent on audio/visual media (122 minutes per day); talking and correspondence (36 minutes per day); reading (25 minutes per day) and other free time (18 minutes per day).

As Table 5 shows the average amount of time that people spent on recreation and leisure activities increases on the weekend compared with weekdays, with men spending more time (5 hours and 32 minutes a day) on the weekend on these activities than women (4 hours and 33 minutes a day).

**Table 5: Average time spent on leisure activities, 2006, minutes per day.**

	Males		Females	
	Weekday	Weekend	Weekday	Weekend
Socialising	6	20	7	19
Visiting entertainment venues(a )	2	8	4	8
Attendance at sports event	*1	6	—	4
Religious activities(b )	*2	8	4	10
Community participation	8	7	11	9
Associated travel	7	22	9	21
<i>Social and community interaction(c )</i>	27	71	35	73
Sport and outdoor activity	20	37	16	21
Games, hobbies, arts, crafts	13	18	11	15
Reading	19	25	23	29
Audio/visual media	144	181	117	134
Other free time	20	29	16	24
Talking and correspondence(d )	21	31	34	43
Associated travel	5	10	4	6
<i>Recreation and Leisure(c )</i>	243	332	223	273
Total free time	270	403	259	346

\*estimate has a relative standard error of 25 percent to 50 percent and should be used with caution

- nil or rounded to zero (including null cells)

(a) includes cultural venues.

(b) includes ritual ceremonies.

(c) includes additional activities not separately included.

(d) includes talking on phone or reading/writing own correspondence.

Source: Australian Bureau of Statistics (2008a), *Time Use on Recreation and Leisure Activities, Australia*, Cat No 4173.0

For men the amount of time spent on sport and outdoor activity increases by only 17 minutes per day on the weekend and for women by only 5 minutes per day compared with time spent during the week. Men spend more time on the weekend on sport and outdoor activity than

women (37 minutes compared with 21 minutes).

Religious activity is found to be a relatively minor activity with respect to time use. Just as for weekdays, by far the greatest expenditure on free time is in audio/visual media (45 percent for men and 39 percent for women). The total amount of free time on the week is 33 percent lower on the weekdays for men and 25 percent for women.

Therefore, even under this extremely broad category of sport and outdoor activity, the time spent, even on weekends is not large and pales into comparison with other activities. Clearly for most working on weekends would not significantly impose on their time spent on sport and outdoor activities.

Further evidence on the value attached to activities during the week is provided by a study by Rose (2015). In the study applied choice analysis was used to examine how employees in the relevant industries value time on Sundays and public holidays. A survey of employees working in the retail and café and restaurant industries was conducted in order to determine the level of hourly rates of pay for which part time and casual employees would be willing to accept work.

The study produced estimates of average acceptable wages for work on Sundays and public holidays relative to the wage rate normally received for work on a weekday. Apart from the averages, ranges (95 percent confidence intervals) of acceptable wages were also produced which show that there is variation between individuals in the wage rates, both above and below the averages, they are willing to work for.

The study found that for employees employed under the café and restaurant industry award, in a normal working week, on Sundays the average acceptable wage was estimated to be 46 percent higher than the weekday hourly rate. For public holidays falling on a weekday the average acceptable wage there was a 24 percent premium over the weekday rate per hour. This average premium rose to 50 percent above the weekday rate per hour if the public holiday was on a Saturday and 55 percent if the public holiday fell on a Sunday.

For those employed under the retail industry award the study found employees were willing, on average, to accept work offers on Sundays when the hourly pay rate was 57 percent greater than the hour normal weekday rate. The average acceptable rate estimates for public

holiday work were similar to those for Sunday work when the public holiday fell on a weekday with an average premium of 65 percent above the weekday rate per hour. This premium rises to 124 percent if the public holiday occurs on a Sunday.

What the results of Rose (2015) indicate is that there is some additional value attached to time on Sundays and public holidays above that attached to weekdays. While, generally, most employees would require a premium to work on Sundays and public holidays, particularly if the two days coincide, the current penalty rates are higher than those required to attract employees to work on these days. The results also imply that there are a variety of wage rates for which many people are willing to work. If wages were to be determined by the market then employers would, generally, need to offer higher wages on Sundays and public holidays than on weekdays to attract most, but not all, workers but not as high as dictated by penalty rates.

In summary, the Australian economy today is dominated by the service sector in which part-time work, casual work, working women and flexibility are the norm for many businesses. Also, the social mores which defined Australian society have, to a large degree, changed radically over time. Among the most relevant here are the growth in participation in education and the consequent supply of part-time and casual labour, participation in the workforce of women with children and use of leisure time for other activities including church attendance and participation in sporting activities. Both of the latter account for a very small percentage of people's leisure time on weekends. Although most employees do value time on Sundays and public holidays more than time on weekdays, the premium is much less than the current penalty rates.

## **Who would benefit from removing penalty rates?**

Those who are currently employed benefit most from the current arrangements and might be worse off without penalty rates, although we cannot be sure because these people may well want more hours of work which they cannot currently get. The question arises as to who would benefit from changes to penalty rates?

Owners of relevant industries businesses would benefit but not necessarily greatly. This is because the industry is very competitive (large number of small firms). In a competitive industry most cost savings are eventually passed on to consumers in lower prices as output

expands from both existing firms and by new firms entering the industry (Hubbard et al 2012). Profit *margins* would be expected to fall to the rate they were before the fall in labour costs. The *volume* of profit per business will increase as turnover is increased. Greater ability of managers to organise the business in the most efficient way would be expected to improve the productivity of the sector.

Suppliers (and their employees) to relevant industries businesses, such as wholesalers, farmers, commercial property renters etc, would benefit as output of the industry rises increasing the demand for inputs into the industry. Complementary industries to relevant industries, such as those in tourism, for example, would benefit from customers having a greater range of choice and lower prices. Australia would be a more attractive destination for overseas tourists.

There would unambiguously be more employment in the industry as turnover increased. There would be greater choice of shifts available. There would be more employment opportunities for the unemployed with the potential for providing a stepping stone into further employment.

Increased employment opportunities and flexibility would allow students and parents to better balance work and other commitments.

Some employees, although their *wage rate* may fall, may even receive higher *total earnings* without penalty rates since the potential to work a greater number of hours will increase.

The biggest beneficiaries from removing penalty rates would be consumers. They would pay lower prices, have more opportunities for shopping, eating out and grooming; and at times which better suit their lifestyle.

The removal of penalty rates would make the economy more efficient and productive as distortions in the allocation of resources would be reduced.

## **Summary**

This report has sought to answer several questions related to proposed changes to the Retail General Industry Award , the Restaurant Industry Award 2010 and the Hair and Beauty Industry Award 2010. On the basis of the analysis above the answers to the questions can be summarised as follows:

### **1 What is the size of the Relevant Industries? This is answered with particular reference to the revenue and employment (including wages) generated by businesses in the Relevant Industries.**

In 2013-14 there were 135 thousand businesses in the retail industry, the number declining from 144 thousand in 2010-11. The industry generates over \$380 billion per year in revenue and employs almost 1.3 million people, about 11 percent of Australian total employment and 15 percent of all service sector employment. The industry generates over \$40 billion in wages and 5 percent of Gross Domestic Product value added. Since the industry is largely involved in selling of goods without significant transformation much of total expenses (73 percent) is made up of purchases of goods. The value added by the industry is made up to a large extent (58 percent) by wages. Average profit margin is 4.8 percent.

In 2014-15 there were estimated to be almost 22 thousand businesses in the hairdressing and beauty services industry employing over 81 thousand people. Businesses in this industry generate almost \$3.9 billion in revenue. The industry is extremely labour intensive with wages making up over 72 percent of total expenses and over 82 percent of total value added. Average profit margin is 11 percent.

In 2014-15 there were over 15 thousand businesses in the cafe and restaurant industry employing almost 155 thousand people and generating over \$16 billion in revenue. The industry is very labour intensive with wages accounting for 28 percent of total expenses and 69 percent of value added. Average profit margin is 8.6 percent.

### **2 What is the importance of the Relevant Industries to the Australia economy?**

The relevant industries generate \$400 billion in revenue and employ over 1.5 million people. This is over 13 percent of total employment for the Australian economy as a whole and almost 19 percent of employment in the services sector – the biggest

generator of GDP and employment and the only sector with a growing share of the economy. The relevant industries also have important flow on effects to industries which are major suppliers and complementary industries such as tourism and banking and finance.

### **3 What is the impact of the Relevant Industries on employment, youth employment and facilitating entry to the Australian workforce?**

The retail, café and restaurant; and hair and beauty services industries are major sources of employment in Australia responsible for over 1 ¼ million jobs. The industries are major employers of women and young people, particularly students. Many of the jobs in the relevant industries are part-time providing the flexibility required in demand for labour in these service sector industries. The availability of part-time employment also allows students and people with families to balance work, education and family commitments. The retail, café and restaurant; and hair and beauty services industries are, thus, vital in facilitating investment in human capital and workforce participation in families with children; and, hence, productivity. The three industries provide important entry points into the Australian workforce

### **4 What impact do labour costs have on the profitability of the Relevant Industries?**

In all of the relevant industries wages make up a large percentage of value added and, therefore, labour costs (wages) are crucial to the profitability of businesses in these industries. Except, perhaps for basic groceries, demand for the goods and services in these industries is highly responsive to price and therefore changes in labour costs significantly affect output and employment.

### **5 To what extent do penalty rate provisions on Sundays and public holidays affect employment in the Relevant Industries on those days?**

The estimated effects of penalty rates is that employment is much less than would be the case if there were no penalty rates. Most businesses would choose, if they could, to employ no hired labour on Sundays or public holidays.

Several possibilities suggest themselves. Businesses will close on these days, make greater use of owner and family labour, or may choose to hire the absolute minimum amount of hired

labour if they think it important to remain open as part of their business strategy; or are contractually obliged to open in, for instance, shopping malls.

## **6 What other supply and demand factors affect employment, output and wages in the Relevant Industries**

Household disposable income plus consumer and business confidence are very important to demand for outputs from the relevant industries.

The future financial health of the relevant industries is uncertain. While the Australian economy has come through the Global Financial Crisis in reasonable shape, consumer confidence and uncertainty, as evidenced by increased household savings and reduced consumption, relative to household income, is still low. Economic commentators are divided on the prospects for the economy. Some point to the continuing strength of the Chinese economy, the relatively low level of government debt, low inflation and relatively low unemployment. Others point to Australia's reliance on China as a major risk, especially as its growth rate moderates. The end of the construction phase of the primary sector, falls in iron ore prices, a struggling export and import competing sector (due to the still high Australian dollar) and a sluggish domestic household consumption-reliant sector, are all factors causing concern. Strong doubts also remain regarding the ability of the Eurozone to solve its financial problems and the consequent international implications of failure. The seemingly sluggish response of consumption and investment to interest rate cuts by the Reserve Bank of Australia (RBA) also point to fragile consumer and business confidence.

## REFERENCES

- Anderson, P., McLellan, R, Overton, J. and Wolfram, G.. 'Price Elasticity of Demand.' Makinac Center for Public Policy, November 13, 1997.  
<http://www.mackinac.org/article.aspx?ID=1247>
- Australian Bureau of Statistics (ABS 2008a), *Time Use on Recreation and Leisure Activities, Australia*, Cat No 4173.0
- Australian Bureau of Statistics (ABS 2008b), *Cafe, Restaurant and Catering Services*, Cat No 8655.0.
- Australian Bureau of Statistics (ABS 2010), *Employee Earnings, Benefits and Trade Union Membership*, Cat No 6310.0.
- Australian Bureau of Statistics (ABS 2012c), *Business Indicators, Australia*, Cat No 5676.0.
- Australian Bureau of Statistics (ABS 2012d), *Australian Industry*, Cat No 8155.0.
- Australian Bureau of Statistics (ABS 2013), *Working Arrangements, Australia*, Cat No 6342.0.
- Australian Bureau of Statistics (2014), *Labour Force, Australia, Detailed*, Cat. No. 6202.0.55.001.
- Australian Bureau of Statistics (ABS 2015a), *Retail Trade, Australia*, Cat No 8501.1.
- Australian Bureau of Statistics (ABS 2015b), *Counts of Australian Businesses, including Entries and Exits*, Cat No 8165.0
- Australian Industrial Relation Commission (AIRC 2010), *Restaurant Industry Award 2010*, AIRC, Melbourne.
- Cardoso, R., Hamermesh, D. and Varejão, J (2012), 'The Timing of Labor Demand', *Annals of Economics and Statistics*, Number 105/106, January/June.
- Chapman, B. and Gruen, F. (1991), 'An Analysis of the Australian Consensual Incomes Policy: the Prices and Incomes Accord', in C. de Neubourg (ed.), *The Art of Full Employment*, Elsevier, North Holland, Amsterdam.
- Colmar Brunton Social Research (2008), *Accommodation, Cafes and Restaurants Industry Profile – Quantitative Analysis*, published in *Accommodation, Cafes and Restaurants Industry Profile – Interim Electronic Report*, Research Report No 1/09, AFPC, Melbourne.
- Commonwealth Court of Conciliation and Arbitration (CCCA 1919), Federated Gas Employees Industrial Union v Geelong Gas Company and Others (1919), AR 13, pp 468 – 469.

Commonwealth Court of Conciliation and Arbitration (CCCA 1947), The Metal Trades Award re Rheem Manufacturing – Judgement re Rates of Pay for Work Performed on Saturdays and Sundays, AR 609, pp 609 – 623.

Corliss, M. and Lewis, P. (2012), ‘Tradespersons Earnings Over the Business Cycle’, *Economic Papers*, Vol 31, No 2, pp 160-172.

Daly, A., Nguyen-Hong, D., Eldridge, D., Gabbitas, O., McCalman, P. (1998), *Youth Wages and Employment*, Productivity Commission Staff Research Paper, Ausinfo, Canberra, October.

D’Amore, A. (2005), Speech to the New South Wales Parliament, *Hansard*, 1<sup>st</sup> March 2005, pp 14324-25.

Divisekera, S. (2006), *Modelling and Estimation of Tourism Elasticities*, CRC for Sustainable Tourism Technical report.

Eisenhauer, J.G. and Principe, K. E. (2009) , ‘Price Knowledge and Elasticity’, Journal of Empirical Generalisations in Marketing Science, Vol 12, No. 2

Fair Work Commission (FWC 2014a), *General Retail Industry Award 2010*,  
[https://www.fwc.gov.au/documents/documents/modern\\_awards/award/ma000004/default.htm](https://www.fwc.gov.au/documents/documents/modern_awards/award/ma000004/default.htm)

Fair Work Commission (FWC 2014b), *Restaurant and Catering Association of Victoria*,  
[https://www.fwc.gov.au/documents/documents/summaries/2014fwcfb1996\\_summary.htm](https://www.fwc.gov.au/documents/documents/summaries/2014fwcfb1996_summary.htm)

Fair Work Commission (FWC 2015b), *Hair and Beauty Industry Award 2010*,  
[https://www.fwc.gov.au/documents/documents/modern\\_awards/award/ma000005/default.htm](https://www.fwc.gov.au/documents/documents/modern_awards/award/ma000005/default.htm)

Fair Work Commission (FWC 2015c), *Restaurant Industry Award 2010*,  
[https://www.fwc.gov.au/documents/documents/modern\\_awards/award/ma000119/default.htm](https://www.fwc.gov.au/documents/documents/modern_awards/award/ma000119/default.htm)

Gargano, (2015a) *Hairdressing and Beauty Services in Australia Industry Report*, IBISWorld

Gargano (2015b) *Restaurants in Australia Industry Report*, IBISWorld,

Gargano (2015c) *Café and Coffee Shops in Australia Industry Report*, IBISWorld.

Garnett, A. and Lewis, P. (2010), ‘The Economy’, in Aulich, C. and Evans, M. (eds), *The Rudd Government*, ANU E Press, Canberra.

Hamermesh, D.S. (1993), *Labour Demand*, Princeton University Press, New Jersey.

Hicks, J.R. (1932) *The Theory of Wages*, London: Macmillan.

Hubbard, R., Garnett, A., Lewis, P. and O’Brien, A. (2011), *Microeconomics*, 2<sup>nd</sup> edition, Pearson, Sydney.

Jensen, B. and de Boer, P. (2006), ‘Long-Run Patterns of Demand: The Expenditure System of the CDES Indirect Utility Function—Theory and Applications’, DEGIT conference paper c011-056.

Leigh, A. (2003) ‘Employment Effects of Minimum Wages: Evidence from a Quasi-Experiment’, *Australian Economic Review*, Vol 36, No 4, pp 361-373.

Lewis, P. (1985), ‘Substitution Between Young and Adult Workers’, *Australian Economic Papers*, Vol. 24, No. 44, pp115-126.

Lewis, P. (2005), ‘Low Pay or No Pay?’, *Policy*, Vol 21, No 3, pp14-20.

Lewis, P., (2002), ‘What Do We Know About Job Creation?’, *Australian Journal of Labour Economics*, Vol. 5, No. 2, pp 279-288.

Lewis, P. (2006), *Minimum Wages and Employment*, Australian Fair Pay Commission, Research Report 1/06.

Lewis, P. (2008), *The Labour Market, Skills Demand and Skills Formation*, Research Report No 6, The Academy of Social Sciences in Australia, Canberra.

Lewis, P. (2014), ‘Paying the Penalty? The High Price of Penalty Rates in Australian Restaurants’, *Agenda*, Vol 21 no 1, pp 5-23.

Lewis, P. (2015) ‘Technological and structural change in Australia’s labour market’, Ch 2 in Committee for the Economic Development of Australia (CEDA 2015), *Australia’s Future Workforce*, Melbourne.

Lewis, P. and Corliss, C. (2010), *Where Tradies Work: an analysis of the labour market for tradespeople*, National Centre for Vocational Education Research, Adelaide.

Lewis, P., Garnett, A., Hawtrey, K. and Treadgold, M. (2010), *The Australian Economy: Your Guide*, Pearson Australia, Sydney.

Lewis, P. and Kirby, M. (1987), ‘The Impact of Incomes Policy on Aggregate Wage Determination in Australia’, *Economic Record*, Vol. 63, No. 181, pp 156-162, reprinted in King, J. (ed) (1992), *Readings in Labour Economics*, MacMillan, Sydney.

Lewis, P. and McDonald, G. (2002), ‘The Elasticity of Demand for Labour in Australia’, *Economic Record*, Vol. 78, No. 240, pp 18-30.

Lewis, P. and Mclean, B. (1998), ‘The Youth Labour Market in Australia’, *Australian Journal of Labour Economics*, Vol. 2, No. 2, pp 157-172.

Lewis, P. and Mclean, B. (1999), ‘The Adult at 18 Alternative’, *Australian Bulletin of Labour*, Vol. 25, No. 3, pp 275-280.

Lewis, P. and Seltzer, A. (1996), ‘Labour Demand’ in Norris, W.K. and Wooden, M. *The Changing Australian Labour Market*, AGPS, Canberra.

Lewis, P. and Spiers, D. (1990), 'Six Years of the Accord - an Assessment', *Journal of Industrial Relations*, Vol. 32, No. 1, pp 53-68, reprinted in Dabschek, B., Griffin, G. and Teicher, J. (eds) (1992), *Contemporary Industrial Relations*, Longman, Melbourne.

Lowe, P. (2012), 'The Euro Crisis and the Financial System', presentation by the Deputy Governor of the Reserve Bank of Australia, *The Economist Bellwether Series*, 12<sup>th</sup> July, Sydney.

National Church Life Survey (NCLS 2010) • *Why Innovation is Needed in Church Life*, NCLS Research Fact Sheet, <http://www.ncls.org.au/default.aspx?sitemapid=6516>

New South Wales Arbitration Commission (NSW 1972), Shift Workers Case AR 72, pp 647 – 651.

Norris, K., Giles, M. and Kelly, R. (2004), *Economics of Australian Labour Markets*, Pearson Australia, Sydney.

Organisation for Economic Cooperation and Development (OECD 2005), *Employment Outlook 2005*, Paris.

Rose, J. (2015), *Value of Time and Value of Work Time during Public Holidays*, report prepared for Australian Business Lawyers and Advisors and Australian Business Industrial, The Institute for Choice, University of South Australia.

Seltzer, A. (1997), 'An Evaluation of the International Evidence on the Employment Effects of Minimum Wage Legislation' *Australian Economic Review*, Vol 30, No 2, pp 208-214.